

DUPLICATE

SUBMIT IN TR/CATE\*  
(Other instructions on  
reverse side)Form approved.  
Budget Bureau No. 42-R1425.UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☒GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Northwest Exploration Company

## 3. ADDRESS OF OPERATOR

P.O. Box 5800 TA Denver, CO 80217

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

2287' FNL &amp; 670' FWL (SW NW)

At proposed prod. zone

Same

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

6.3 miles South of Panguitch, Utah

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT. 670'  
(Also to nearest drlg. unit line, if any)

## 16. NO. OF ACRES IN LEASE

960.53

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160.93

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT. 2640'+

## 19. PROPOSED DEPTH

12,550'

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

7512' GR

## 22. APPROX. DATE WORK WILL START\*

April 1, 1981

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
20"	16" New	65# H-40 ST&C	500'	Circ Class "G" 3% gel
12 1/4"	9 5/8" New	36/40# N-80LT&C	5,000'	300 sx "lite"
8 3/4"	7" New	29/32# N-80/CY5 LT&C	12,500'	600 sx "lite"

1. Drill 20" hole and set 16" surface casing to 500' with good returns.
2. Drill 12 1/4" hole and set 9 5/8" intermediate casing to 5000' and cement.
3. Log B.O.P. checks in daily drill reports and drill 8 3/4" hole to 12,500'.
4. Run tests if warranted and run 7" casing if productive.
5. Run logs, as needed, and perforate and stimulate as needed.

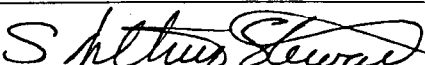
## EXHIBITS ATTACHED:

- "A" Location and Elevation Plat
- "B" The Ten-Point Compliance Program
- "C" The Blowout Preventer Diagram
- "D" The Multi-Point Requirements for A.P.D.
- "E" & "E<sub>1</sub>" Access Road Maps to Location
- "F" Radius Map of Field
- "G" & "G<sub>1</sub>" Drill Pad Layout, Production Facilities and Cut-Fill Cross-Section
- "H" Drill Rig Layout

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

  
S. Arthur Stewart

TITLE Division Drilling Engineer

DATE 2-12-81

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

(Orig. Sgd.) A. M. RAFFOUL

FOR

E. W. GUYNNE  
DISTRICT ENGINEER

DATE

APR 17 1981

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED  
TO OPERATOR'S COPY

NOTICE OF APPROVAL

\*See Instructions On Reverse Side

FLARING OR VENTING OF  
GAS IS SUBJECT TO NTL 4-A  
DATED 1/1/80

State 0 &amp; 6

Identification No. 348-81

United States Department of the Interior  
Geological Survey  
Oil and Gas Operations  
2000 Administration Building  
1745 West 1700 South  
Salt Lake City, Utah 84104

NEPA CATEGORICAL EXCLUSION REVIEW

PROJECT IDENTIFICATION

Operator/Project Name NORTHWEST EXPLORATION COMPANY  
Project Type OIL WELL  
Project Location 2287' FNL, 670' FNL, SW/4 NW/4 Sec 7 T35S, R5W  
Date Project Submitted 3-12-81

FIELD INSPECTION

Date 4-8-81

Field Inspection  
Participants

<u>GEORGE DIWACHAK</u>	<u>USGS</u>
<u>BRENT NORTHRUP</u>	<u>BLM</u>
<u>FLOYD RICHARDS</u>	<u>NORTHWEST</u>
<u>LINCOLN LYMAN</u>	<u>LYMAN CONSTRUCTION</u>
<u>BRUCE HOWARD, CLARK HOWARD</u>	<u>HOWARD CONST. Co.</u>
<u>FRED FRAMPTON</u>	<u>POWERS ELEVATION</u>

I have reviewed the proposal in accordance with the categorical exclusion review guidelines. This proposal would not involve any significant effects and, therefore, does not represent an exception to the categorical exclusions.

4/14/81

Date Prepared

George J. Diwachak  
Environmental Scientist

I concur

4/15/81  
Date

Ed Lyman  
District Supervisor

BLM input received 4/13/81

# CATEGORICAL EXCLUSION REVIEW INFORMATION SOURCE

Criteria 516 DM 2.3.A	Federal/State Agency			Local and private corre- spondence (date)	Previous NEPA	Other studies and reports	Staff expertise	Onsite inspection (date)	Other
	Corre- spondence (date)	Phone check (date)	Meeting (date)						
1. Public health and safety	1 (4/10/81)					2	6	6 (4/8/81)	8, 4
2. Unique charac- teristics						2	6	6	8, 9, 4
3. Environmentally controversial							6	6	4
4. Uncertain and unknown risks						2	6	6	4, 9
5. Establishes precedents	1						6	6	4, 9
6. Cumulatively significant							6	6	4
7. National Register historic places	1								4
8. Endangered/ threatened species	1								
9. Violate Federal, State, local, tribal law							6	6	4, 8

PLEASE REFER TO ATTACHED LEGEND

## SUMMARY OF ENVIRONMENTAL IMPACT EVALUATION

Operator NORTHWEST  
EXPLORATION CO

Well No. 1  
Sec. 7 T. 35S R. 5W  
Lease No. 12-16983  
County GARFIELD  
EA No. CER-348-81

## KEY

- 0 - Enhances  
1 - No Impact  
2 - Minor Impact  
3 - Moderate Impact  
4 - Major Impact  
5 - N/A

Operator <u>NORTHWEST</u> <u>EXPLORATION Co</u>						Construction				Pollution				Drilling Production				Transport Operations			Accidents		Other		
Well No. <u>1</u> Sec. <u>7</u> T. <u>35S</u> R. <u>5W</u> Lease No. <u>12-16983</u> County <u>GARFIELD</u> EA No. <u>CER - 348-81</u>						Roads, bridges, crossings	Drill pad, pits	Transmission lines, pipelines	Others (pump stations, compressor stations, etc.)	Burning, trash disposal, sewage	Noise/Obstruction of Scenic Views	Subsurface disposal	Others (toxic gases, noxious gas, air pollutants, etc.)	Well drilling	Fluid removal (Prod. wells, facilities)	Secondary Recovery	Mineral processing (ext. facilities)	Others	Trucks	Pipelines	Others	Spills and Leaks	Operational failure		
<u>KEY</u> 0 - Enhances 1 - No Impact 2 - Minor Impact 3 - Moderate Impact 4 - Major Impact 5 - N/A																									
Land Use	Forestry	2	2	2	2	1	1	1	5	1	2	1	5	5	2	2					2				
	Grazing	2	2	2	2	2	2	-																	
	Wilderness	5	-																						
	Agriculture	5	-																						
	Residential-Commercial	5	-																						
	Mineral Extraction	5	-																						
	Recreation	2	-																						
	Scenic Views	2	2	2	2	2	2	5	5	2	2	5	5	5	2	2	5	2	2						
	Parks, Reserves,	5	-																						
	Monuments	5	-																						
	Historical Sites	5	-																						
	Unique Physical Features	5	-																						
Flora & Fauna	Birds	2	-																						
	Mammals	2	-																						
	Reptiles	2	-																						
	Fish	5	-																						
	Endangered Species	1	-																						
	Vegetation	2	-																						
Phy. Char.	Surface Water	2	2	2	2	2	5	5	5	2	2	5	5	5	2	2	5	2	2						
	Ground Water	1	1	1	1	2	5	5	5	2	2	5	5	5	5	5	5	5	5						
	Air Quality	2	2	2	2	2	5	5	5	2	2	5	5	5	2	1	5	1	2						
	Erosion	2	2	2	2	5	5	5	5	2	5	5	5	5	2	2	5	5	5						
	Soils	2	2	2	2	2	5	5	5	2	2	5	5	5	2	2	5	3	2						
	Land Stability	2	1	2	1	1	5	5	5	1	5	5	5	5	2	2	5	5	5						
	Other Minerals	5	-																						
	Effect on Local Economy	2	2	2	2																				
	Cumulative Impacts	1	-																						
	Safety & Health	1	-																						
Others																									

1. SMA INPUT
2. Reviews Reports, or information received from Geological Survey (CD, GD, WRD, TD)
3. LEASE STIPULATIONS / TERMS
4. APD
5. Operator Correspondence
6. Field Observation (SEE ATTACHED FIELD NOTES)
7. Private Rehab Agreement
8. RECOMMENDED STIPULATIONS
9. SUMMARY OF ENVIRONMENTAL IMPACT EVALUATION



NORTHWEST  
PANGUICH #1

↑  
S-SW



NORTHWEST  
PANGUICH #1

↑  
N

## RECOMMENDED STIPULATIONS

1. ALL STIPULATIONS PROVIDED BY BLM IN CORRESPONDENCE TO USGS DATED APRIL 10, 1981 SHALL BE ADITERED TO.
2. ACCESS FROM THE PANGUICH LAKE ROAD, ADMINISTERED BY GARFIELD COUNTY, SHALL APPROACH FROM THE SOUTH. ARRANGEMENTS MUST BE MADE WITH THE COUNTY FOR CONSTRUCTION OF THE ACCESS APPROACH
3. A CULVERT OF ADEQUATE SIZE TO HANDLE NORMAL RUNOFF SHALL BE INSTALLED AT THE ACCESS APPROACH FROM THE PANGUICH LAKE ROAD
4. TOPSOIL SHALL BE WINDROWED AROUND THE LOCATION AND SEGREGATED FROM STOCKPILED VEGETATION AND SPOIL OR EXCESS CUT MATERIALS
5. WATER AUTHORIZATION MUST BE OBTAINED FROM THE TOWN OF PANGUICH.



**POWERS ELEVATION**

OIL WELL ELEVATIONS AND LOCATIONS  
CHERRY CREEK PLAZA, SUITE 1201  
600 SOUTH CHERRY STREET  
DENVER, COLORADO 80222  
PHONE NO. 303/321-2217

March 24, 1981

State of Utah  
Division of Oil, Gas, and Minerals  
1588 West, North Temple  
Salt Lake City, Utah 84116

**RECEIVED**

**MAR 26 1981**

**DIVISION OF  
OIL, GAS & MINING**

RE: Filing Application for Permit to Drill  
Northwest Exploration Company  
#1 Panguitch  
SW NW Sec. 7 T35S R5W  
2287' FNL & 670' FWL  
Garfield County, Utah

Gentlemen:

Enclosed are three copies each of the Federal A.P.D. Form 9-331C,  
the location and elevation plat, the Ten-Point Compliance Program,  
and the Blowout Preventer Diagram for the above-referenced well  
location.

Please return the approved copies to:

Mr. Art Stewart  
Northwest Exploration Company  
P.O. Box 5800 T.A.  
Denver, Colorado 80217

Very truly yours.

POWERS ELEVATION

*Connie L. Frailey*

Connie L. Frailey  
Manager, Environmental Department

CLF/kle  
Enclosures

**APPROVED BY THE DIVISION  
OF OIL, GAS, AND MINING**  
**DATE:** \_\_\_\_\_  
**BY:** \_\_\_\_\_

cc: Art Stewart, Northwest Exploration Company, P.O. Box 5800 T.A.,  
Denver, Colorado 80217  
Ed Lewis, Powers Elevation, Grand Junction, Colorado  
Neil Edwards, Powers Elevation, Richfield, Utah  
Dirt Contractor



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☒GAS  
WELL ☐

OTHER

SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Northwest Exploration Company

Attn: Mr. Art Stewart (303) 620-3533 (Bureau file)

## 3. ADDRESS OF OPERATOR

P.O. Box 5800 TA Denver, CO 80217

## 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

2287' FNL &amp; 670' FWL (SW NW)

At proposed prod. zone

Same

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

6.3 miles South of Panguitch, Utah

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drg. unit line, if any)

670'

## 16. NO. OF ACRES IN LEASE

960.53

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160.93

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

2640'+

## 19. PROPOSED DEPTH

12,550' Raibab

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

7512' GR

## 22. APPROX. DATE WORK WILL START\*

April 1, 1981

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
20"	16" New	65# H-40 ST&C	500'	Circ Class "G" 3% gel
12 1/4"	9 5/8" New	36/40# N-80 LT&C	5,000'	300 sx "lite"
8 3/4"	7" New	29/32# N-80/CY5 LT&C	12,500'	600 sx "lite"

1. Drill 20" hole and set 16" surface casing to 500' with good returns.
2. Drill 12 1/4" hole and set 9 5/8" intermediate casing to 5000' and cement.
3. Log B.O.P. checks in daily drill reports and drill 8 3/4" hole to 12,500'.
4. Run tests if warranted and run 7" casing if productive.
5. Run logs, as needed, and perforate and stimulate as needed.

## EXHIBITS ATTACHED:

- "A" Location and Elevation Plat
- "B" The Ten-Point Compliance Program
- "C" The Blowout Preventer Diagram
- "D" The Multi-Point Requirements for A.P.D.
- "E" & "E<sub>1</sub>" Access Road Maps to Location
- "F" Radius Map of Field
- "G" & "G<sub>1</sub>" Drill Pad Layout, Production Facilities and Cut-Fill Cross-Section
- "H" Drill Rig Layout

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

  
S. Arthur Stewart

TITLE Division Drilling Engineer

DATE 2-12-81

(This space for Federal or State office use)

PERMIT NO.

30106

APPROVAL DATE

APPROVED BY

TITLE

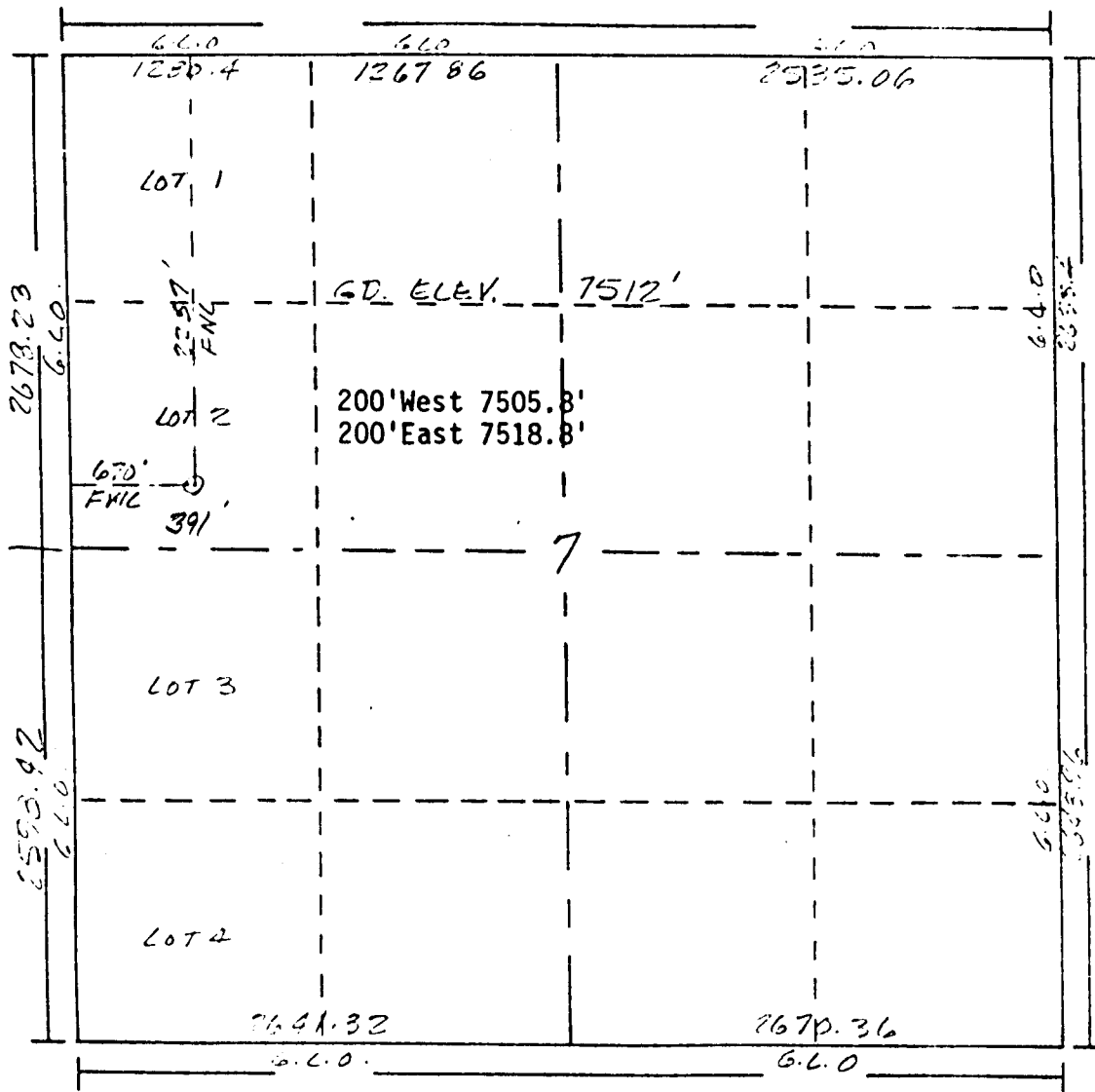
DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions, On Reverse Side



R. 5 W.

T.  
35  
S.

Scale... 1" = 1000'

Powers Elevation Company, Inc. of Denver, Colorado  
has in accordance with a request from Bill & Jean  
for NORTHWEST EXPLORATION CO.

determined the location of #1 PANGUITCH

to be 2287' ENL & 670' FWC

Section 7 Township 35S.

Range 5 WEST OF THE SALT LAKE

Meridian

SARFIELD County, UTAH

I hereby certify that this plat is an  
accurate representation of a correct  
survey showing the location of  
#1 PANGUITCH

Date: 3-5-82

Bill & Jean  
Licensed Land Surveyor No. 4189  
State of UTAH

Northwest Exploration  
Panguitch #1  
Panguitch Utah Quad  
Garfield County, Utah

CLADAR BREAK, NAT MON. 24  
PANGUITCH LAKE 9 MI.

500  
- EET  
4180

N  
↑

EXHIBIT "B"  
TEN-POINT COMPLIANCE PROGRAM  
OF NTL-6 APPROVAL OF OPERATIONS

Attached to Form 9-331C  
Northwest Exploration Company  
#1 Panguitch  
SW NW Sec. 7 T35S R5W  
2287' FNL & 670' FWL  
Garfield County, Utah

1. The Geologic Surface Formation

The surface formation is the Isom Volcanics.

2. Estimated Tops of Important Geologic Markers

Claron	3950'
Kaiparowits	5450'
Tropic Sh.	7150'
Dakota	8650'
Navajo	10,000'
Moenhopi	10,875'
Kaibab	12,145'
Total Depth	12,550'

3. Estimated Depths of Anticipated Water, Oil, Gas or Minerals

	1500'	possible water
Navajo	10,000'	oil/gas
Moenhopi	10,875'	oil/gas
Kaibab	12,145'	oil/gas

#### 4. The Proposed Casing Program

<u>HOLE SIZE</u>	<u>INTERVAL</u>	<u>SECTION LENGTH</u>	<u>SIZE (OD)</u>	<u>WEIGHT, GRADE &amp; JOINT</u>	<u>NEW OR USED</u>
20"	0-500'	500'	16"	65 H-40 ST&C	new
*12 1/4"	0-5000'	5000'	9 5/8"	36/40 N-80 LT&C	new
8 3/4"	-12,500'	12,500'	7"	29/32 N-80/cy5 LT&C	new

\*Expect lost circulation. Will run scavenger tubing to 2500'+ on intermediate string.

Cement Program:

Surface - Circ. Class "G" + 3% gel  
Intermediate - 300 sx "lite"  
Production - 600 sx "lite"

*(5000 psi)*

#### 5. The Operator's Minimum Specifications for Pressure Control

EXHIBIT "C" is schematic diagram of the blowout preventer equipment. The BOP's will be hydraulically tested to half of working pressure after nipping up and after any use under pressure. Pipe rams will be operationally checked each 24-hour period, as will blind rams and annular preventer each time pipe is pulled out of the hole. Such checks of BOP will be noted on daily drilling reports.

Accessories to BOP will include an upper and lower kelly cock, floor safety valve, drill string BOP and choke manifold with pressure rating equivalent to the BOP stack.

#### 6. The Type and Characteristics of the Proposed Circulating Muds

Mud system will be gel-chemical with adequate stocks of sorptive agents on site to handle possible spills of fuel and oil on the surface. Heavier muds will be on location to be added if pressure requires.

<u>DEPTH</u>	<u>TYPE</u>	<u>WEIGHT #/gal.</u>	<u>VISCOSITY-sec./qt.</u>	<u>FLUID LOSS cc</u>
0-500'	Nondispersed	8.5-8.9	30-40	less than 25
500-12,500'	Gel/chem.	8.9-9.5	30-40	less than 25

#### 7. The Auxiliary Equipment to be Used

- An upper and lower kelly cock will be kept in the string.
- A float will be used at the bit.
- A mud logging unit and gas detecting device will be monitoring the system.
- A stabbing valve will be on the floor to be stabbed into the drill pipe when kelly is not in the string.

8. The Testing, Logging and Coring Programs to be Followed

- (a) A Drill Stem Test is anticipated in the Navajo, Moenhopi and Kaibab formations. Other zones will be tested as needed.
- (b) The logging program will consist of the following:  
A DIL, Somic, Density/Neutron, and a Dipmeter from 500-12,500'.  
Other logs will be determined at well site to best evaluate any shows.
- (d) Completion program will be to sand frac. Appropriate Sundry Notice will be submitted.

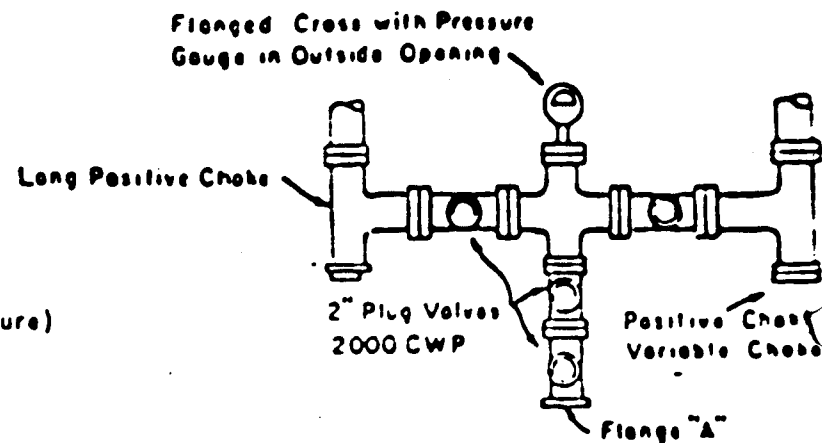
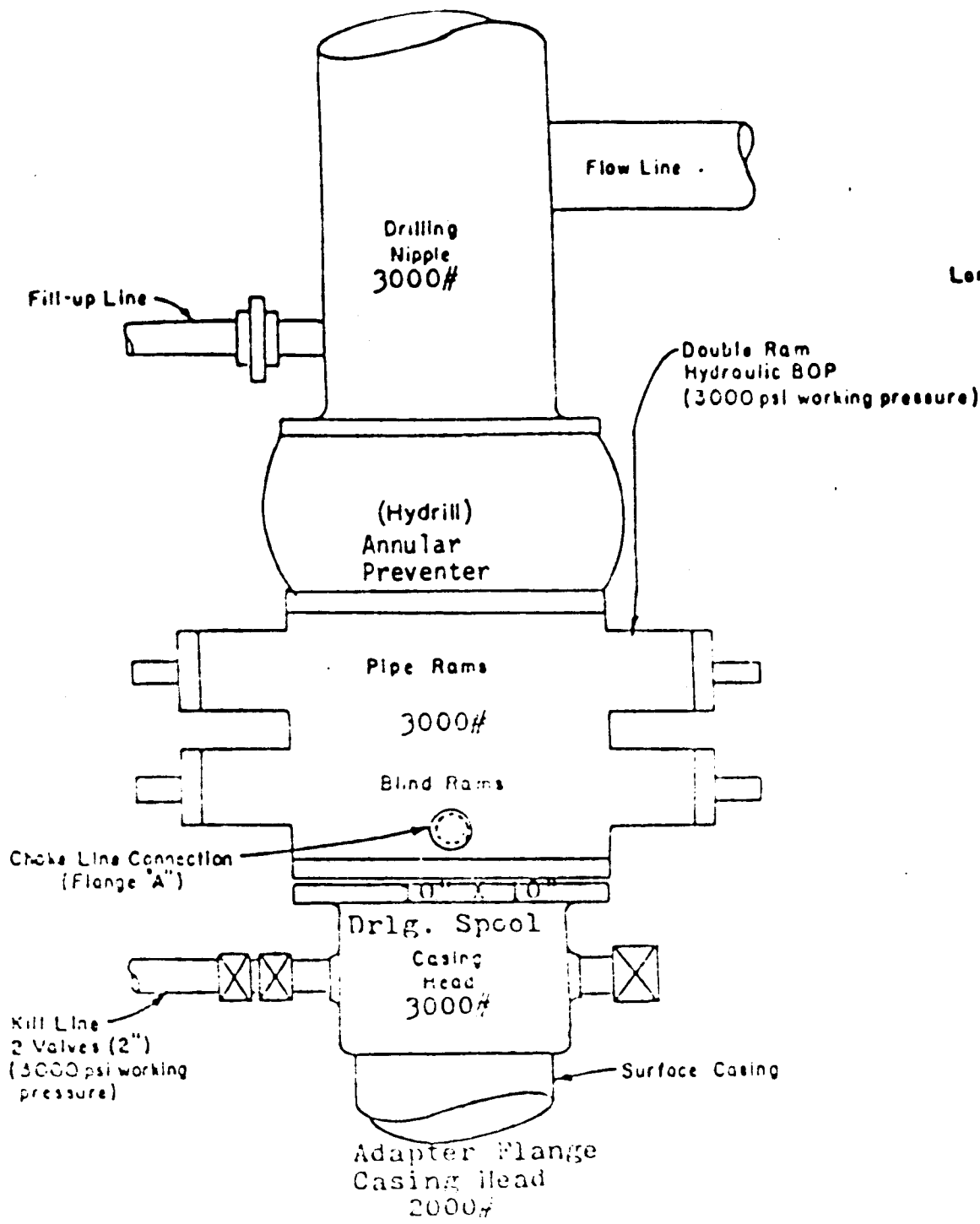
9. Any Anticipated Abnormal Pressures or Temperatures

No abnormal pressures or temperatures have been noted or reported in wells drilled in the area nor at the depths anticipated in this well.

No hydrogen sulfide or other hazardous fluids or gases have been found, reported or known to exist at these depths in the area.

10. Anticipated Starting Date and Duration of the Operations

The anticipated starting date is set for 4-1-81, or as soon as possible after examination and approval of drilling requirements. Operations should be completed within 7 months after spudding the well and drilling to casing point.



PLAN VIEW-CHOKE MANIFOLD

EXHIBIT "C"  
BLOWOUT PREVENTER  
DIAGRAM

## \*\* FILE NOTATIONS \*\*

DATE: March 31, 1981OPERATOR: Northwest Exploration Co.WELL NO: Panguitch #1Location: Sec. 7 T. 35S R. 5W County: GarfieldFile Prepared: ☐Entered on N.I.D: ☐Card Indexed: ☐Completion Sheet: ☐API Number 43-017-30106CHECKED BY:Petroleum Engineer: W.F. Minder 5-11-81

Director: \_\_\_\_\_

Administrative Aide: C-3(c) - ~~Not a topographic~~ - too close to 5' boundary line (only 353') / OK on any other oil & gas wellsAPPROVAL LETTER:Bond Required: ☐Survey Plat Required: ☐

Order No. \_\_\_\_\_

O.K. Rule C-3 ☐Rule C-3(c), Topographic Exception - company owns or controls acreage within a 660' radius of proposed site ☐Lease Designation ☒Plotted on Map ☐Approval Letter Written ☒Hot Line ☒P.I. ☒





# United States Department of the Interior

IN REPLY REFER TO

3100(403)

## BUREAU OF LAND MANAGEMENT

Kanab Resource Area  
320 North First East  
Kanab, Utah  
84741

April 10, 1981


Mr. Ed Guynn  
United States Geological Survey  
2000 Administration Building  
1745 West 1700 South  
Salt Lake City, Utah 84104

Dear Mr. Guynn:

I am enclosing a list of surface management stipulations which we recommend be attached to any approval by your office of Northwest Energy Company's APD for Panguitch Well No. 1 southwest of Panguitch, Utah.

Clearances for archaeology and threatened and endangered species of plants and wildlife are also enclosed.

Sincerely,

  
For Rex Rowley  
Rex Area Manager

Enclosures



BLM STIPULATIONS FOR  
NORTHWEST EXPLORATION COMPANY'S  
PANGUITCH WELL NO. 1

1. The maximum width of the access road to be constructed will be 18 feet with the centerline following the flags as closely as possible. Ponderosa pine will be avoided in construction of this road.
2. Vegetation and topsoil removed from the drill site will be stockpiled separately.
3. Reclamation of the drill site will consist of the following:
  - a. All garbage that can't be burned in the trash cage will be taken to a sanitary land fill. No garbage will be buried on the site.
  - b. Stockpiled vegetation will be buried in the reserve pit.
  - c. The entire site will be restored as nearly as possible to its original condition. All cuts, fills, pits, sumps, and excavations will be graded and contoured to blend with the surrounding terrain.
  - d. All disturbed areas will be scarified prior to replacing the stockpiled topsoil.
  - e. The following seed will be planted between 1/4" - 1/2" deep with a rangeland drill or by broadcast seeding followed by a light disking in the spring or fall:

<u>Species</u>	<u>Pounds</u>	<u>PLS/Acre</u>
	<u>Rangeland Drill</u>	<u>Broadcast</u>
Crested Wheatgrass ( <i>Agropyron cristatum</i> )	5	9

4. Reclamation of the access road will consist of the following:
  - a. The access road will be scarified prior to seeding. In the case of production, the ditches constructed along the access road for drainage will be backfilled.
  - b. Seeding will be undertaken in the same manner as the prescribed for the drill site.
  - c. A few rocks or trees will be placed along the access road to block vehicular traffic.
5. Repeated seedings of all disturbed areas will be required until a satisfactory vegetative cover is accomplished.
6. All work that is required to rehabilitate the drill site and access road will be completed within six months after completion of drilling operations.

*George*

FROM: : DISTRICT GEOLOGIST,           , SALT LAKE CITY, UTAH  
TO : DISTRICT ENGINEER, O&G, SALT LAKE CITY, UTAH  
SUBJECT: APD MINERAL EVALUATION REPORT

LEASE NO. USA-u-16983(1-15-63)OPERATOR: NORTHWEST EXPLORATION CO. WELL NO. # 1

LOCATION: SE 1/4 SW 1/4 NW 1/4 sec. 7, T. 35S, R. 5W, USM  
GARFIELD County, UTAH

## 1. Stratigraphy: OPERATORS TOPS ARE REASONABLE

ISOM VOLCANICS - SURFACE	
CLARON	- 3,950'
Kaiparowits	- 5,450'
Tropic Shale	- 7,150'
DAKOTA	- 8,650'
NAVAJO	- 10,000'
MOENKOPI	- 10,875'
KAIBAB	- 12,145'
TOTAL DEPTH	- 12,550'

2. Fresh Water: POSSIBLE THROUGH VOLCANICS 0 - 3950 ft.

3. Leasable Minerals: NONE

4. Additional Logs Needed: NONE

5. Potential Geologic Hazards: NONE KNOWN

6. References and Remarks:

Signature: Larry RichardsonDate: 4-4-81

NORTHWEST EXPLORATION COMPANY

1125 Seventeenth Street, Suite 2100  
(303) 620-3500

Mailing Address  
P.O. Box 5800, Terminal Annex  
Denver, Colorado 80217

May 4, 1981

Utah Division of Oil, Gas, and Mining  
1588 West, North Temple  
Salt Lake City, Utah 84116  
ATTENTION: Mr. Mike Minder

RE: Northwest Exploration Application To Drill  
Panguitch #1  
SW NW Sec 7-T35N-R5W  
Garfield County, Utah  
Lease: USA U-16983

Dear Mr. Minder:

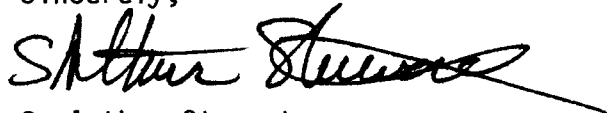
Northwest Exploration Company requests permission, under provisions in Rule C-3-C-1 and 2, to drill the referenced well within 500 feet of the southern boundary of the lease. This location is necessary due to the topography of the area (see attached copy of topo map).

Northwest Exploration has all acreage within 660' radius under lease.

Your earliest attention to this matter is appreciated as we are faced with a June 30, 1981 lease expiration.

Should you have any questions, please call me at 303-620-3528.

Sincerely,



S. Arthur Stewart  
Manager - Drilling Operations

SAS:tmf  
Attachment

May 19, 1981

Northwest Exploration Company  
P. O. Box 5800 TA  
Denver, Colorado 80217

Attention: Mr. Art Stewart

Re: Well No. Panguitch #1  
Sec. 7, T. 35S, R. 5W, SW NW  
Garfield County, Utah

Insofar as this office concerned, approval to drill the above referred to oil well on said unorthodox location is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

MICHAEL T. MINDER - Petroleum Engineer  
Office: 533-5771  
Home: 876-3001


Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling. Your cooperation in completing this form will be appreciated.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-017-30106.

Sincerely,

DIVISION OF OIL, GAS, AND MINING

  
Michael T. Minder  
Petroleum Engineer

MTM/ko  
cc: USGS

P

DIVISION OF OIL, GAS AND MINING

SPODDING INFORMATION

NAME OF COMPANY: Northwest Exploration Co.

WELL NAME: Panguitch #1

SECTION SW NW 7 TOWNSHIP 35S RANGE 5W COUNTY Garfield

DRILLING CONTRACTOR Denton Brothers

RIG # 4

SPODDED: DATE 6-21-81

TIME 2:00 p.m.

How rotary

DRILLING WILL COMMENCE \_\_\_\_\_

REPORTED BY Ron Coats

TELEPHONE # 676-8192

DATE 6-22-81 SIGNED D. B.

NOTICE OF SPUD

Justified  
Exploration  
Comp.

Caller: Ken Coats

Phone: \_\_\_\_\_

Well Number: Panguitch #1

Location: SW NW 7-355-5W

County: Garfield State: Utah

Lease Number: U-16983

Lease Expiration Date: \_\_\_\_\_

Unit Name (If Applicable): \_\_\_\_\_

Date & Time Spudded: 6.21.81 2:00 P.M.

Dry Hole Spudder/Rotary: \_\_\_\_\_

Details of Spud (Hole, Casing, Cement, etc.) 124

Rotary Rig Name & Number: Jenton Bro. #1

Approximate Date Rotary Moves In: \_\_\_\_\_

FOLLOW WITH SUNDRY NOTICE

Call Received By: Vick

Date: 6/22/81

RECEIVED  
JUN 23 1981

DIVISION OF  
OIL, GAS & MINING

DIVISION OF OIL, GAS AND MINING

PLUGGING PROGRAM

NAME OF COMPANY: Northwest Exploration Co.

WELL NAME: Panguitch #1

SECTION 7 TOWNSHIP 35S RANGE 5W COUNTY Garfield

VERBAL APPROVAL GIVEN TO PLUG AND ABOVE REFERRED TO WELL IN THE FOLLOWING MANNER:

TOTAL DEPTH: 6752' (12,555')

CASING PROGRAM:

20", 133#, @ 583'  
16" @ 500'  
9 5/8" @ 5000'  
7" @ 12,500'

FORMATION TOPS:

Isom Volcanics	Surface
Claron	3950'
Kaiparowita	5450'
Tropic Sh.	7150'
Dakota	8650'
*Navajo	10,900'
*Moenkopi	10,875'
*Kiabab	12,145'
	12,550'

PLUGS SET AS FOLLOWS:

- 1) 4790'-4720'
- 2) 4200'-4000'
- 3) 2100'-2000'
- 4) 530'-430'
- 5) 25'-Surface

No DST's, nos cores

DATE 8-14-81

SIGNED

Not approved by State



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill up to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☒ gas ☐ other ☐

2. NAME OF OPERATOR

Northwest Exploration Company

3. ADDRESS OF OPERATOR

P. O. Box 5800, T.A., Denver, CO 80217

4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)

AT SURFACE: 2287' FNL & 670' FWL

AT TOP PROD. INTERVAL: Same

AT TOTAL DEPTH: Same

16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

REQUEST FOR APPROVAL TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF ☐  
FRACTURE TREAT ☐  
SHOOT OR ACIDIZE ☐  
REPAIR WELL ☐  
PULL OR ALTER CASING ☐  
MULTIPLE COMPLETE ☐  
CHANGE ZONES ☐  
ABANDON\* ☐  
(other) ☐

☐  
☐  
☐  
☐  
☐  
☐  
☐  
☒

5. LEASE

USA U-16983

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Panguitch

9. WELL NO.

#1

10. FIELD OR WILDCAT NAME

Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec 7 T35S R5W

12. COUNTY OR PARISH

Garfield County

13. STATE

Utah

14. API NO.

15. ELEVATIONS (SHOW DF, KDB, AND WD)

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Verbal notice of plugging and abandoning this well was given to the U.S.G.S. on 8/14/81 at 11:30 a.m. This well was plugged, as follows:

4790' - 4720' 100 sks "H"  
4200' - 4000' 347 sks "H"  
2100' - 2000' 121 sks "H"  
530' - 430' 226 sks "H"  
25' - Surface 56 sks "H"

Casing Program

583' - 20" - 12 jts K-55 133# STC

Rig released 8/15/81.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED

Sally L. DuVal

TITLE Specialist,  
Regulatory Compliance

DATE

August 24, 1981

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE

(See instructions on  
reverse side)Form approved.  
Budget Bureau No. 42-R355.5.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other \_\_\_\_\_

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. LESVR. ☐ Other \_\_\_\_\_

2. NAME OF OPERATOR

Northwest Exploration Company

3. ADDRESS OF OPERATOR

P.O. Box 5800 T.A., Denver, Colorado 80217

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 2287' FNL &amp; 670' FWL

At top prod. interval reported below Same

At total depth Same

14. PERMIT NO.

API 43-017-30106

DATE ISSUED

4-17-81

12. COUNTY OR

PARISH

Garfield Co.

13. STATE

Utah

15. DATE SPURRED

6-22-81

16. DATE T.D. REACHED

8-12-81

17. DATE COMPL. (Ready to prod.)

N/A Plug &amp; Abandoned

18. ELEVATIONS (DF, BEE, RT, GR, ETC.)\*

7512' GR

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD &amp; TVD

6752'

21. PLUG, BACK T.D., MD &amp; TVD

N/A

22. IF MULTIPLE COMPL.,  
HOW MANY\*

N/A

23. INTERVALS  
DRILLED BY

ROTARY TOOLS

All

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*

N/A - Dry hole.

25. WAS DIRECTIONAL  
SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

FDC/CNL, DIL, Sonic, GR-Caliper, HRD Dipmeter

27. WAS WELL CORED

Yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"	K-55 133#	583'	26"	665 sx BJ C1 "G" + 2% A-2	None
13-3/8"	Not used			+ 1/4# sk Celloflake.	
9-5/8"	Not used			Tailed w/300 sx C1 "G" +	
5-1/2"	Not used			2% A-7 + 1/4# sk Celloflake	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

30. TUBING RECORD

31. PERFORATION RECORD (Interval, MD &amp; TVD)

N/A

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
N/A	N/A

33.\*

DIVISION OF  
OIL, GAS & MINING

PRODUCTION

DATE FIRST PRODUCTION

N/A

PRODUCTION METHOD (If pumping, size and type of pump)

N/A

WELL STATUS (Producing or  
shut-in)

Plugged &amp; Abandoned

DATE OF TEST

N/A

HOURS TESTED

N/A

CHOKE SIZE

N/A

PROD'N. FOR  
TEST PERIOD

N/A

OIL—BBL.

N/A

GAS—MCF.

N/A

WATER—BBL.

N/A

GAS-OIL RATIO

N/A

FLOW. TUBING PRESS.

N/A

CASING PRESSURE

N/A

CALCULATED  
24-HOUR RATE

N/A

OIL—BBL.

N/A

GAS—MCF.

N/A

WATER—BBL.

N/A

OIL GRAVITY-API (CORR.)

N/A

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

N/A

TEST WITNESSED BY

N/A

35. LIST OF ATTACHMENTS

Logs have been forwarded under separate cover by Schlumberger Company.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

Lacey L. Dullace

TITLE

Specialist, Regulatory Compliance

9/6/81

\*(See Instructions and Spaces for Additional Data on Reverse Side)

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29:** "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool. **Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES			38. GEOLOGIC MARKERS			
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TRUE VERT. DEPTH
1. Igneous - intrusive (Core)	6200'	6210'	Cored 53 min/ft. Cut 10'. Lithology: White microcrystalline to cryptocrystalline igneous rock with accessory minerals of biotite, hornblende, & magnetite. Core was moderately fractured, fractures filled with silica cement. Overall texture massive.	Kaiparowtis	1940	N/A
				Tropic	3560	
2. Drill Stem Tests				Dakota	4200	
				Entrada	4800	
				Carmel	4890	
			No drill stem tests were run.	Miocene Diorite	5225	

FILE IN TRIPLICATE  
FORM OGC-8-X

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116

\*REPORT OF WATER ENCOUNTERED DURING DRILLING\*

Well Name & Number Panguitch #1

Operator Northwest Exploration Co. Address P.O. 5800, T.A., Denver, CO 80217

Contractor Denton Brothers Drilling Address P.O. 2304, Casper, WY 82602

Location SW 1/4 NE 1/4 Sec. 7 T. 35N R. 5W County Garfield

Water Sands

	<u>Depth</u>	<u>Volume</u>	<u>Quality</u>
	From To	Flow Rate or Head	Fresh or Salty
1.	<u>No water flows.</u>		
2.	<u></u>		
3.	<u></u>		
4.	<u></u>		
5.	<u></u>		

(Continue of reverse side if necessary)

<u>Formation Tops</u>	Kaiparowtis	1940'	Carmel	4890'
	Tropic	3560'	Miocene Diorite	5225'
	Dakota	4200'		
<u>Remarks</u>	Entrada	4800'		

NOTE: (a) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure.

(b) If a water analysis has been made of the above reported zone, please forward a copy along with this form.